ANALYST:		VPDES NO	

Parameter: Total Residual Chlorine
Method: Amperometric Titration (Direct)
04/01

METHOD OF ANALYSIS:

	18th EDITION OF STANDARD METHODS-4500-CL D
	EPA METHODS FOR CHEMICAL ANALYSIS-330.1
	ASTM D1253 - 86(92)

		Y	N
1)	Is PAO normality 0.00564N? [SM Cl C.3.a;330.1-5.1]		
2)	Are reagents free of contamination or growths? [Permit]		
3)	Is KI solution discarded when it turns yellow? [SM-3.c; 330.1-5.3]		
4)	Is the pH of the acetate buffer solution 4? [SM-3.d; 330.1-5.5]		
5)	Are reagents within their indicated shelf lives? [Permit]		
6)	Is sample volume 200 mL for chlorine residual up to 2 mg/L; 100 mL or proportionately less diluted up to 200 mL for chlorine residuals in excess of 2 mg/L? [SM-4.a; 330.1-6.1]		
7)	Is at least 1 mL KI solution added? [SM-4.c; 330.1-6.3]		
8)	Is at least 1 mL acetate buffer added after KI solution? [SM-4.c; 330.1-6.4]		
9)	Is titrant added in progressively smaller increments until all needle movement ceases? [SM-4.c; 330.1-6.6]		
10)	Is last increment of titrant that causes no needle response subtracted from final volume? [SM-4.c; 330.1-6.6]		
11)	Is the sample value calculated correctly? [SM-5; 330.1-7.1] TRC (mg/L) = $\frac{A \times 200}{\text{mL of sample}}$ A = mL PAO used		

PROBLEMS: